NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

FIELD BORDER

(Ft.)

STANDARD

CODE 386

DEFINITION

A strip of permanent vegetation established at the edge or around the perimeter of a field. across a field should be planned using the Hedgerow Planting standard (422).

PURPOSE

- Reduce soil erosion
- Soil and water quality protection
- Provide wildlife food and cover
- Reduce competition from adjacent woodlands
- Protect edges of fields that are used as turn rows or travel lanes
- Increase carbon storage in biomass and soils
- Management of beneficial insect populations
- Improve air quality

CONDITIONS WHERE PRACTICE APPLIES

At the edges of cropland fields and to connect other buffer practices within fields. May also apply to recreation land or other land uses where agronomic crops are grown.

Plantings specifically to filter water pollutants should be planned using the filter area or strip standard (393), or riparian buffer standards (390 or 391). Woody plantings within or

CRITERIA

General Criteria Applicable to All Purposes

Field borders shall be established around the field edges to the extent needed to meet the resource needs and producer objectives. Field borders may be established for a single purpose or multipurpose use. All Field borders will be a minimum of 30 feet wide. Cut-back field borders established to reduce woodland competition and/or improve wildlife habitat will be a maximum of 50 feet wide.

Mowing will only occur between February 15th and March 31st, or between August 1st and August 31st.

Ephemeral gullies and rills present in the planned border area will be smoothed as part of seedbed preparation.

Additional Criteria to Reduce Soil Erosion and Protect Soil and Water Quality

General - Locate borders around entire perimeter of the field, or as a minimum, install borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Maintaining Field Setback Distances for Manure and Chemical Applications. Border widths will be designed to conform to minimum field application setback widths established by state or local regulations.

Reducing Soil Compaction from Equipment Traffic and Parking. Field borders being used as turn rows or frequently used travel lanes should be established to a vigorous grass sod (Kentucky bluegrass, fescues or perennial ryegrass). Turn rows and travel lanes need to be wide enough to accommodate farm equipment.

Border widths will be adjusted to accommodate short term equipment parking, loading/unloading equipment, grain harvest operations, etc.

Additional Criteria to Provide Wildlife Food and Cover

Field borders for wildlife habitat will be established to grasses and forbs, or grasses and legumes. Tall fescue or Reed canarygrass will not be used in field borders for wildlife habitat.

Field borders for wildlife habitat should only be mowed infrequently (once every third year or less frequent).

Cut back field borders established for wildlife cover will have brush piled or windrowed. Recut segments using a rotation (i.e., one-fifth of the total length every two years). Use herbicides to control invasive woody species.

Protect field borders from grazing and unintentional fires.

Additional Criteria to Improve Air Quality

Establish plant species with foliar and structural characteristics that optimize interception, adsorption and absorption of airborne particulates. Examples are tall native grasses such as big bluestem, Indiangrass and switchgrass.

Additional Criteria to Increase Carbon Storage in Biomass and Sequestration in the Soil

Establish plant species that will produce the greatest above and below ground biomass for the site. Examples are tall, deep rooted native grasses such as big bluestem, Indiangrass, and switchgrass.

CONSIDERATIONS

Field borders are more effective and provide more environmental benefits when planted around the entire field. Field borders are also more effective when used to enhance and connect existing permanent vegetation, especially wildlife habitat corridors and travel lanes

Native species should be used when feasible and meet producer objectives. Overseeding borders of introduced grasses with legumes will increase plant diversity and wildlife benefits.

Field borders on the contour can reduce soil erosion and sediment transport. Waterbars or berms may be needed to breakup or redirect concentrated water flows within the borders across the contour.

If bank stabilization is a concern, select fibrous deep-rooted plants.

Rows of shrubs (Hedgerow Planting, 422) adjacent to field borders will often enhance field borders ability to harbor beneficial insects, and will also provide additional wildlife benefits.

Increasing the width of the field border will increase the potential for carbon sequestration.

If installation or maintenance of the practice has potential of affecting cultural resources (Archaeological, historic, historic landscape, or traditional cultural properties), follow NRCS state policy for considering cultural resources.

PLANS AND SPECIFICATIONS

Site-specific plans and specifications will be prepared, including a plan map and narrative statement addressing:

- Border widths and lengths.
- Location within the field or farm boundary
- Vegetation to be used.
- Site preparation.
- Planting method and timing.
- Liming or fertilizer requirements.
- Operation and maintenance requirements.

Refer to the Cool-Season Grasses and Legumes, or Warm-Season Grasses (Plant Hardiness Zones) maps in Section I of the Pennsylvania Technical Guide (PATG) for appropriate seeding dates.

OPERATION AND MAINTENANCE

Field borders require careful management and maintenance for performance and longevity.

Unless the field border vegetation is going to be intentionally disturbed for wildlife habitat, maintain herbaceous vegetation so that it provides at least 80% ground cover throughout the year. The following O&M activities will be planned and applied as needed:

- Shut off sprayers and raise tillage equipment to avoid damage to field borders.
- Shape and reseed border areas damaged by storms, chemicals, tillage or equipment traffic.
- Fertilize and control noxious weeds as needed to maintain plant vigor.
- Ephemeral gullies and rills that develop in the border will be filled and reseeded.
- For wildlife habitat follow mowing and recutting recommendations under Criteria.